

# 6KY8

## High-Mu Triode—Beam Power Tube

### NOVAR TYPE

For Combined Vertical-Deflection Oscillator  
and Amplifier Service in TV Receivers

#### Electrical:

Heater Characteristics and Ratings:

Voltage (AC or DC) . . . . .	6.3 ± 0.6	volts
Current at heater volts = 6.3 . . . . .	1.100	amp
Peak heater-cathode voltage (Each unit):		
Heater negative with respect to cathode	200	max. volts
Heater positive with respect to cathode	200 <sup>a</sup>	max. volts

Direct Interelectrode Capacitances (Approx.):<sup>b</sup>

#### Triode Unit:

Grid to plate . . . . .	0.44	pf
G <sub>T</sub> to (K <sub>T</sub> , H) . . . . .	15.0	pf
P <sub>T</sub> to (K <sub>T</sub> , H) . . . . .	7.0	pf

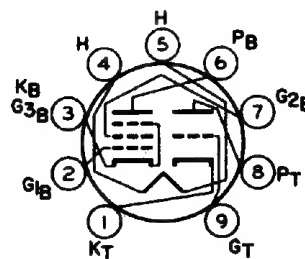
#### Beam Power Unit:

Grid No.1 to plate . . . . .	0.048	pf
G <sub>1p</sub> to (K <sub>B</sub> +G <sub>3B</sub> , G <sub>2B</sub> , H) . . . . .	2.6	pf
P <sub>p</sub> to (K <sub>B</sub> +G <sub>3B</sub> , G <sub>2B</sub> , H) . . . . .	0.28	pf

#### Mechanical:

Operating Position . . . . . Any  
Type of Cathodes . . . . . Coated Unipotential  
Maximum Overall Length . . . . . 3.110"  
Maximum Seated Length . . . . . 2.730"  
Length, Base Seat to Bulb Top (Excluding tip) . . . . . 2.210" to 2.390"  
Diameter . . . . . 1.062" to 1.188"  
Bulb . . . . . T9  
Socket . . . . . Cinch Mfg. Co. No.149 19 00 033, Industrial Electronics Hardware Corp. No.S0-0968-SL1, or equivalent  
Base . . . . . Small Button Novar 9-Pin (JEDEC No.E9-75)  
Basing Designation for BOTTOM VIEW . . . . . 9QT

- Pin 1—Triode Cathode
- Pin 2—Beam Power Grid No.1
- Pin 3—Beam Power Cathode & Grid No.3
- Pin 4—Heater
- Pin 5—Heater
- Pin 6—Beam Power Plate
- Pin 7—Beam Power Grid No.2
- Pin 8—Triode Plate
- Pin 9—Triode Grid



#### Characteristics, Class A<sub>1</sub> Amplifier:

	Triode Unit		Beam Power Unit		
Plate Voltage . . . . .	250	50	135	120	volts
Grid-No.2 Voltage . . . . .	—	120	120	Connected to plate at socket	volts
Grid-No.1 Voltage . . . . .	—3	0	—10	—10	volts
Amplification Factor . . . . .	64	—	—	7	



RADIO CORPORATION OF AMERICA  
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DATA  
4-64

# 6KY8

	Triode Unit	Beam Power Unit	
Plate Resistance (Approx.)	40000	- 18000 -	ohms
Transconductance. . . . .	1600	- 8400 -	$\mu$ hos
Plate Current . . . . .	1.4	170 <sup>c</sup> 39	ma
Grid-No.2 Current . . . . .	-	20 <sup>c</sup> 3	ma
Grid-No.1 Voltage (Approx.) for plate ma = 1. . . . .	-	- 24 -	volts

## VERTICAL-DEFLECTION OSCILLATOR (Triode Unit)

### Maximum Ratings, Design-Maximum Values:

For operation in a 525-line, 30-frame system<sup>d</sup>

DC Plate Voltage. . . . .	330 max.	volts
Peak Negative-Pulse Grid Voltage. . . . .	400 max.	volts
Peak Cathode Current. . . . .	77 max.	ma
Average Cathode Current . . . . .	22 max.	ma
Plate Dissipation . . . . .	1.5 max.	watts

### Maximum Circuit Values:

Grid-Circuit Resistance:

For grid-resistor-bias operation. . . . . 2.2 max. megohms

## VERTICAL-DEFLECTION AMPLIFIER (Beam Power Unit)

### Maximum Ratings, Design-Maximum Values:

For operation in a 525-line, 30-frame system<sup>d</sup>

DC Plate Voltage. . . . .	300 max.	volts
Peak Positive-Pulse Plate Voltage <sup>e</sup> . . . . .	2000 abs.max.	volts
DC Grid-No.2 (Screen-Grid) Voltage. . . . .	150 max.	volts
Peak Negative-Pulse Grid-No.1 (Control-Grid) Voltage. . . . .	250 max.	volts
Peak Cathode Current. . . . .	200 max.	ma
Average Cathode Current . . . . .	70 max.	ma
Plate Dissipation . . . . .	12 max.	watts
Grid-No.2 Input . . . . .	1.9 max.	watts

### Maximum Circuit Values:

Grid-No.1-Circuit Resistance:

For grid-resistor-bias operation. . . . . 2.2 max. megohms

<sup>a</sup> The dc component must not exceed 100 volts.

<sup>b</sup> Without external shield.

<sup>c</sup> This value can be measured by a method involving a recurrent wave form such that the plate dissipation and grid-No.2 input will be kept within ratings in order to prevent damage to the tube.

<sup>d</sup> As described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations", Federal Communications Commission.

<sup>e</sup> This rating is applicable where the duration of the voltage pulse does not exceed 15 per cent of one vertical scanning cycle. In a 525-line, 30-frame system, 15 per cent of one vertical scanning cycle is 2.5 milliseconds.

**DIMENSIONAL OUTLINE & CURVES**  
shown under Type 15KY8 also apply to the 6KY8

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